

## § 1910.401

Protective Signaling Systems for Watchman, Fire Alarm, and Supervisory Service.

NFPA 72E-74 Standard for Automatic Fire Detectors.

NFPA 74-75 Standard for Installation, Maintenance, and Use of Household Fire Warning Equipment.

NFPA 76A-73 Standard for Essential Electrical Systems for Health Care Facilities.

NFPA 77-72 Recommended Practice on Static Electricity.

NFPA 80-77 Standard for Fire Doors and Windows.

NFPA 86A-73 Standard for Ovens and Furnaces; Design, Location and Equipment.

NFPA 88A-73 Standard for Parking Structures.

NFPA 88B-73 Standard for Repair Garages.

NFPA 91-73 Standard for the Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal, or Conveying.

NFPA 101-78 Code for Safety to Life from Fire in Buildings and Structures. (Life Safety Code.)

NFPA 325M-69 Fire-Hazard Properties of Flammable Liquids, Gases, and Volatile Solids.

NFPA 493-75 Standard for Intrinsically Safe Apparatus for Use in Class I Hazardous Locations and Its Associated Apparatus.

NFPA 496-74 Standard for Purged and Pressurized Enclosures for Electrical Equipment in Hazardous Locations.

NFPA 497-75 Recommended Practice for Classification of Class I Hazardous Locations for Electrical Installations in Chemical Plants.

NFPA 505-75 Fire Safety Standard for Powered Industrial Trucks Including Type Designations and Areas of Use.

NMAB 353-1-79 Matrix of Combustion-Related Properties and Classification of Gases, Vapors, and Selected Solids.

NMAB 353-2-79 Test Equipment for Use in Determining Classifications of Combustible Dusts.

NMAB 353-3-80 Classification of Combustible Dusts in Accordance with the National Electrical Code.

[46 FR 4056, Jan. 16, 1981; 46 FR 40185, Aug. 7, 1981]

## 29 CFR Ch. XVII (7-1-02 Edition)

APPENDIX B TO SUBPART S TO PART 1910—EXPLANATORY DATA [RESERVED]

APPENDIX C TO SUBPART S TO PART 1910—TABLES, NOTES, AND CHARTS [RESERVED]

### Subpart T—Commercial Diving Operations

**AUTHORITY:** Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, and 657); sec. 107, Contract Work Hours and Safety Standards Act (the Construction Safety Act) (40 U.S.C. 333); sec. 41, Longshore and Harbor Workers' Compensation Act (33 U.S.C. 941); Secretary of Labor's Order No. 8-76 (41 FR 25059), 9-83 (48 FR 35736), or 1-90 (55 FR 9033), as applicable; 29 CFR part 1911.

**SOURCE:** 42 FR 37668, July 22, 1977, unless otherwise noted.

#### GENERAL

#### § 1910.401 Scope and application.

(a) *Scope.* (1) This subpart (standard) applies to every place of employment within the waters of the United States, or within any State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, Guam, the Trust Territory of the Pacific Islands, Wake Island, Johnston Island, the Canal Zone, or within the Outer Continental Shelf lands as defined in the Outer Continental Shelf Lands Act (67 Stat. 462, 43 U.S.C. 1331), where diving and related support operations are performed.

(2) This standard applies to diving and related support operations conducted in connection with all types of work and employments, including general industry, construction, ship repairing, shipbuilding, shipbreaking and longshoring. However, this standard does not apply to any diving operation:

(i) Performed solely for instructional purposes, using open-circuit, compressed-air SCUBA and conducted within the no-decompression limits;

(ii) Performed solely for search, rescue, or related public safety purposes by or under the control of a governmental agency; or

(iii) Governed by 45 CFR part 46 (Protection of Human Subjects, U.S. Department of Health and Human Services) or equivalent rules or regulations

established by another federal agency, which regulate research, development, or related purposes involving human subjects.

(iv) Defined as scientific diving and which is under the direction and control of a diving program containing at least the following elements:

(A) Diving safety manual which includes at a minimum: Procedures covering all diving operations specific to the program; procedures for emergency care, including recompression and evacuation; and criteria for diver training and certification.

(B) Diving control (safety) board, with the majority of its members being active divers, which shall at a minimum have the authority to: Approve and monitor diving projects; review and revise the diving safety manual; assure compliance with the manual; certify the depths to which a diver has been trained; take disciplinary action for unsafe practices; and, assure adherence to the buddy system (a diver is accompanied by and is in continuous contact with another diver in the water) for SCUBA diving.

(b) *Application in emergencies.* An employer may deviate from the requirements of this standard to the extent necessary to prevent or minimize a situation which is likely to cause death, serious physical harm, or major environmental damage, provided that the employer:

(1) Notifies the Area Director, Occupational Safety and Health Administration within 48 hours of the onset of the emergency situation indicating the nature of the emergency and extent of the deviation from the prescribed regulations; and

(2) Upon request from the Area Director, submits such information in writing.

(c) *Employer obligation.* The employer shall be responsible for compliance with:

(1) All provisions of this standard of general applicability; and

(2) All requirements pertaining to specific diving modes to the extent diving operations in such modes are conducted.

[42 FR 37668, July 22, 1977, as amended at 47 FR 53365, Nov. 26, 1982; 58 FR 35310, June 30, 1993]

#### § 1910.402 Definitions.

As used in this standard, the listed terms are defined as follows:

*Acfm:* Actual cubic feet per minute.

*ASME Code or equivalent:* ASME (American Society of Mechanical Engineers) Boiler and Pressure Vessel Code, Section VIII, or an equivalent code which the employer can demonstrate to be equally effective.

*ATA:* Atmosphere absolute.

*Bell:* An enclosed compartment, pressurized (closed bell) or unpressurized (open bell), which allows the diver to be transported to and from the underwater work area and which may be used as a temporary refuge during diving operations.

*Bottom time:* The total elapsed time measured in minutes from the time when the diver leaves the surface in descent to the time that the diver begins ascent.

*Bursting pressure:* The pressure at which a pressure containment device would fail structurally.

*Cylinder:* A pressure vessel for the storage of gases.

*Decompression chamber:* A pressure vessel for human occupancy such as a surface decompression chamber, closed bell, or deep diving system used to decompress divers and to treat decompression sickness.

*Decompression sickness:* A condition with a variety of symptoms which may result from gas or bubbles in the tissues of divers after pressure reduction.

*Decompression table:* A profile or set of profiles of depth-time relationships for ascent rates and breathing mixtures to be followed after a specific depth-time exposure or exposures.

*Dive location:* A surface or vessel from which a diving operation is conducted.

*Dive-location reserve breathing gas:* A supply system of air or mixed-gas (as appropriate) at the dive location which is independent of the primary supply system and sufficient to support divers during the planned decompression.

*Dive team:* Divers and support employees involved in a diving operation, including the designated person-in-charge.

*Diver:* An employee working in water using underwater apparatus which supplies compressed breathing gas at the ambient pressure.